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James K. Smith
Director
Federal Relations

May 15, 1996

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Room 222
Washington, DC 20554

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MAY 15 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Re: **Ex Parte Statement**
CC Docket 95-116

Dear Mr. Caton:

On May 14, 1996, Mr. Terry Appenzeller, Mr. Brian Baldwin and I met, in separate meetings, with Mr. John Nakahata, Special Assistant to Chairman Hundt; Ms. Lauren Belvin, Sr. Legal Advisor to Commissioner Quello; Mr. Dan Gonzalez, Legal Advisor to Commissioner Chong; Ms. Regina Keeney, Chief, Common Carrier Bureau and staff; and Ms. Karen Brinkmann, Ms. Jennifer Warren and Mr. David Wye of the Wireless Telecommunications Bureau to discuss Ameritech's position in the above referenced proceeding. The attached material was used as the basis of our discussion.

Sincerely,

Attachment

cc: J. Nakahata (w/o attach.)
L. Belvin (w/o attach.)
D. Gonzalez (w/o attach.)
R. Keeney (w/o attach.)
K. Brinkmann (w/o attach.)
J. Warren (w/o attach.)
D. Wye (w/o attach.)

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Long Term Number Portability Discussion

C C Docket 95-116

May 14, 1996

Ameritech

Long Term Number Portability Discussion

- **Location Routing Number ("LRN") Should Be Adopted As The Nationwide Architecture**
- **Illinois Number Portability Workshop Should Serve As A Model for The Nation**
 - **Industry Consensus Achieved**
 - **Documentation Produced/Distributed Nationally, Internationally**
 - **Significant Progress Has Occurred**
 - **However, Still Many Implementation Issues To Be Resolved Prior To 3Q 1997 Implementation in Chicago**
- **Illinois Workshop Has Selected A Neutral Third Party Administrator: Lockheed - Martin**

The FCC Should Adopt LRN As The National Architecture

- **Joint Letter Signed By Eight Companies Expecting To Implement Number Portability Recommendation (Attachment)**

| | |
|-------------|---------------|
| - Ameritech | - MFS |
| - AT&T | - Sprint |
| - Centel | - Teleport |
| - MCI | - Time Warner |

- **Represents Broad Industry Consensus**
- **Many States and Canada Have Already Selected LRN**
- **Illinois Workshop Determined LRN Best Met Call Model Requirements in September 1995. Other States Have Used This Criteria As Basis for Their Selection of LRN**
- **Single National Architecture Is The Most Expeditious Method for Implementing Number Portability**
 - **Single Architecture for Venders To Develop Software**
 - **Eliminates Inter-operability Issues**

Selection Criteria

Mandatory Attributes:

- Available To All Wireline Customers Within Selected Area**
- No Number Change Required**
- Database Dip Possible From Originating, Intermediate or Terminating Switch**
- Incumbent LEC (Donor Switch) Not Essential For Completing Calls**
- Interface with Non-LNP Capable Networks**
- Database Response Provides Sufficient Information for Unambiguous Routing To Terminating Switch**

Selection Criteria (continued)

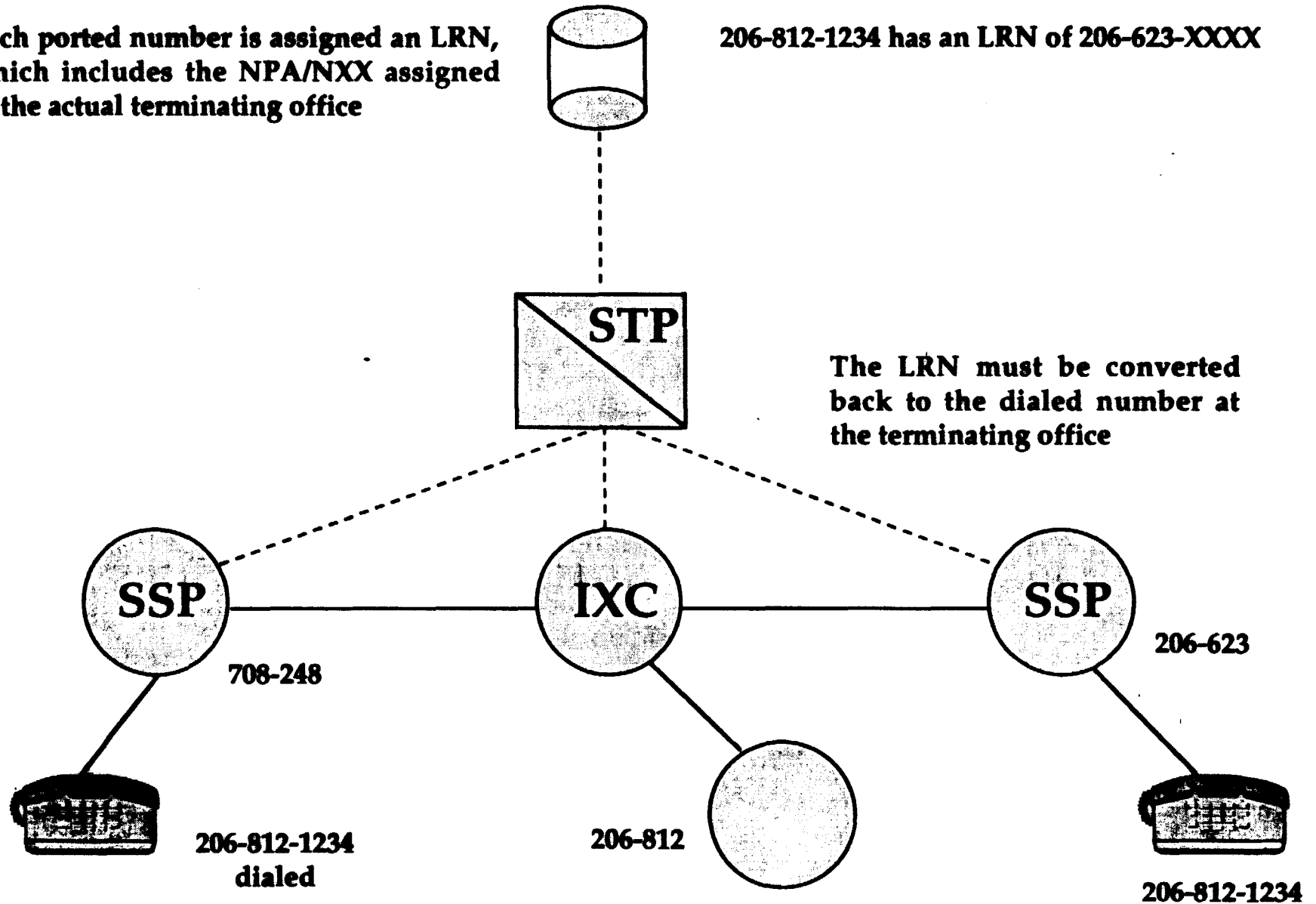
Mandatory Attributes (continued):

- **Minimum Increase In Call Setup Delay**
- **Existing Features Should Be Unaffected**
- **Operator Assisted and Coin Calls Must Work Properly**
- **Ported Calling Card Numbers Must Be Validated**
- **911 Calls Must Function Properly**
- **Calls To Ported Numbers Must Be Rated Properly**
- **Solution Must Be Migratable To Location and Service Portability**
- **Solution Should Conserve Numbering Resources**

AT&T LRN Proposal

Each ported number is assigned an LRN, which includes the NPA/NXX assigned to the actual terminating office

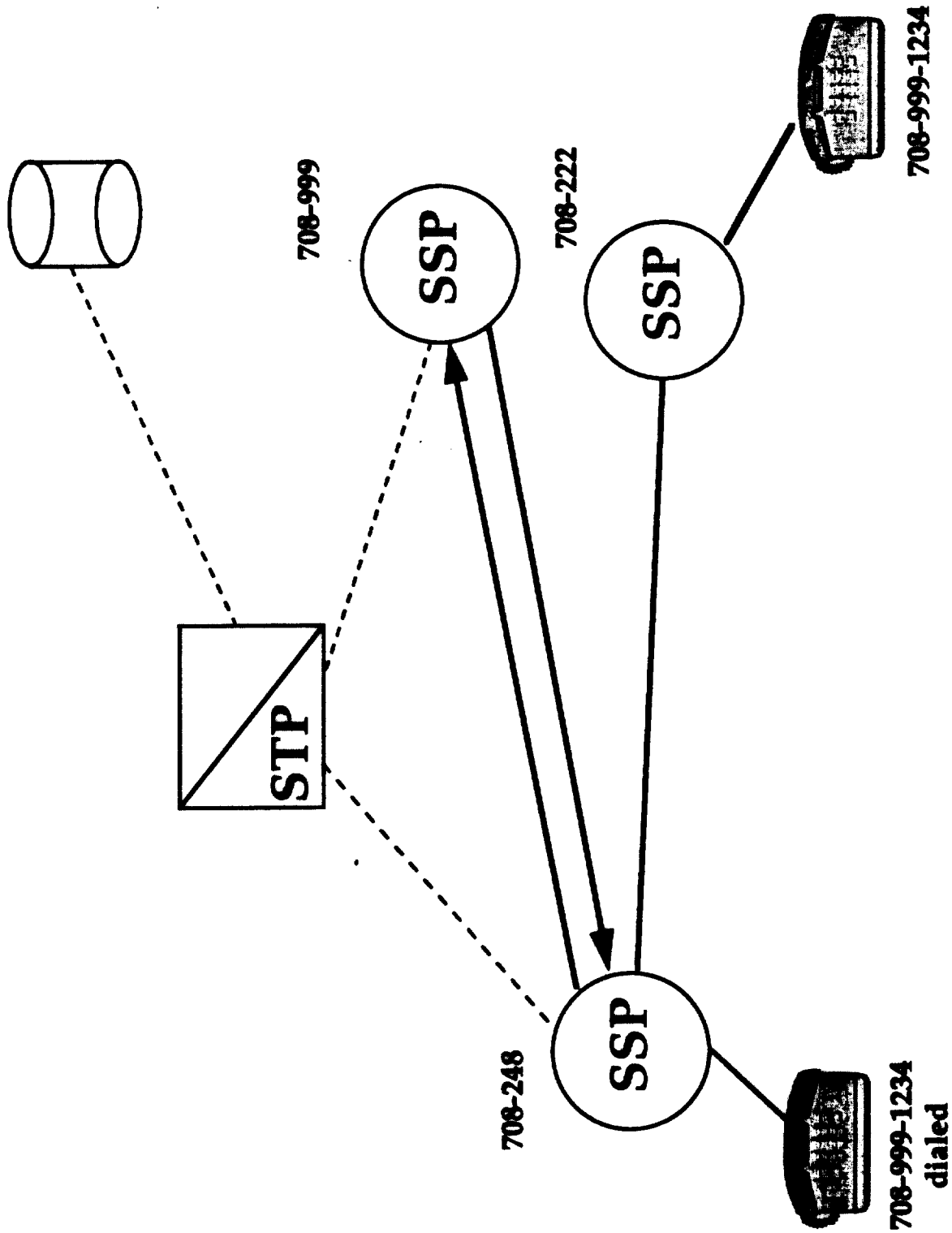
206-812-1234 has an LRN of 206-623-XXXX



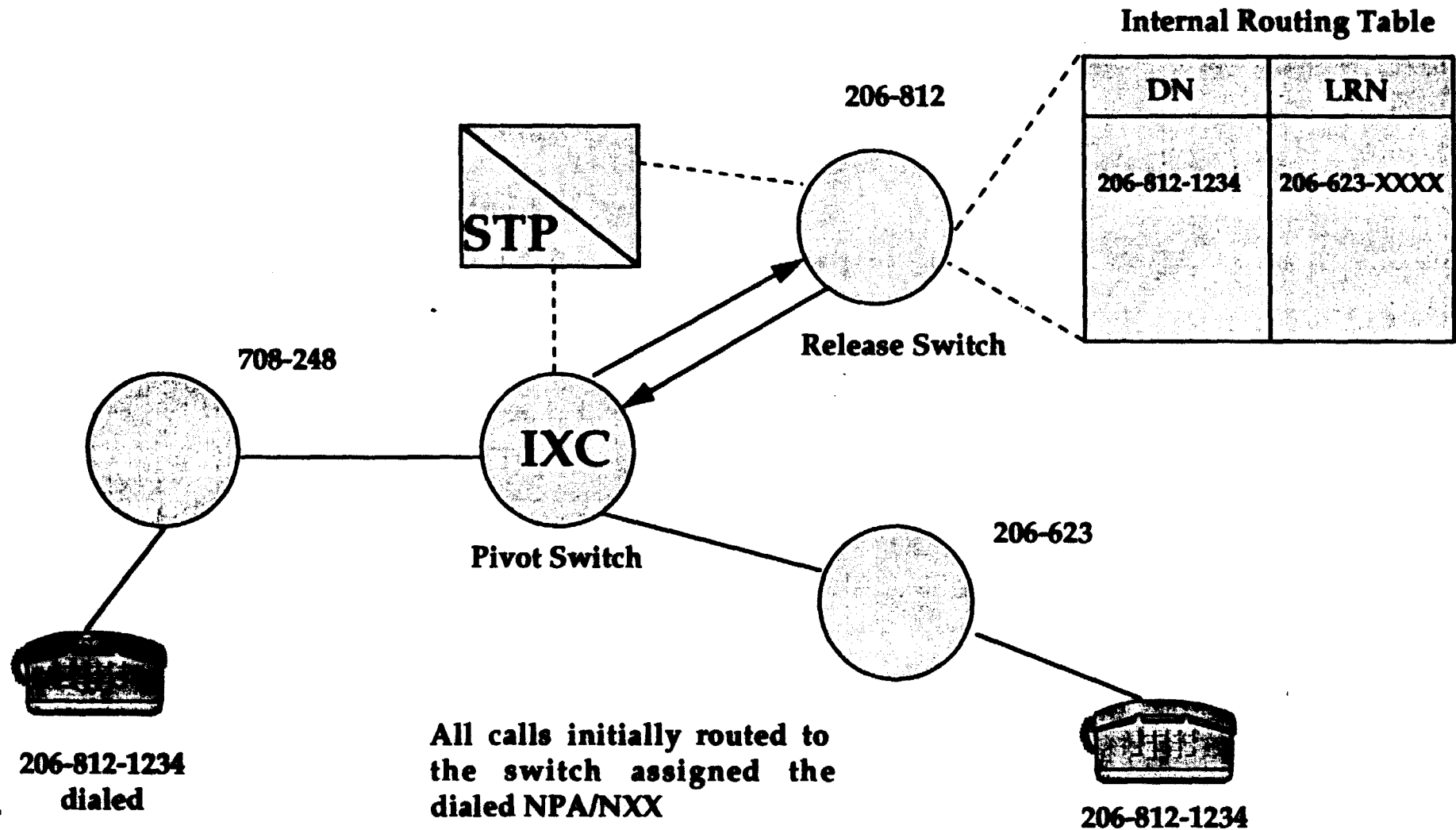
Query on Release

- **Will not be universally available with the initial software release in Illinois**
- **Concerns with the cost of deployment**
- **Will increase call setup delay, however perception of calling customer unknown at this time**
- **Standard already under development**
- **May relieve switch processor overloads**
- **Can be provisioned on an individual route basis**
- **Does involve the donor LEC network, but this is also a probability with basic LRN during initial year**
- **Does rely on SS7, but this is also essential for all long-term solutions**

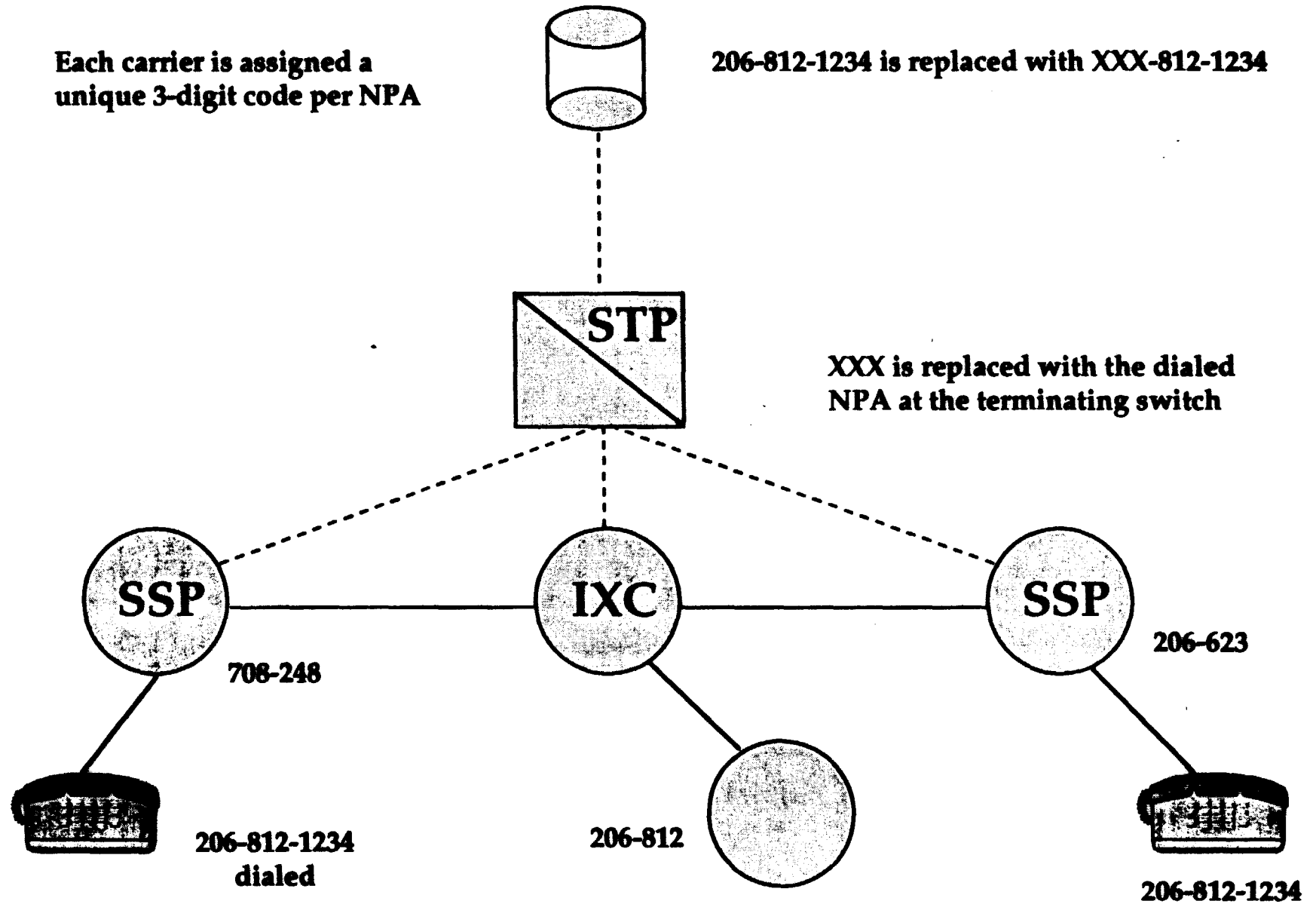
Query on Release Enhancement



Pac Bell RTP Proposal



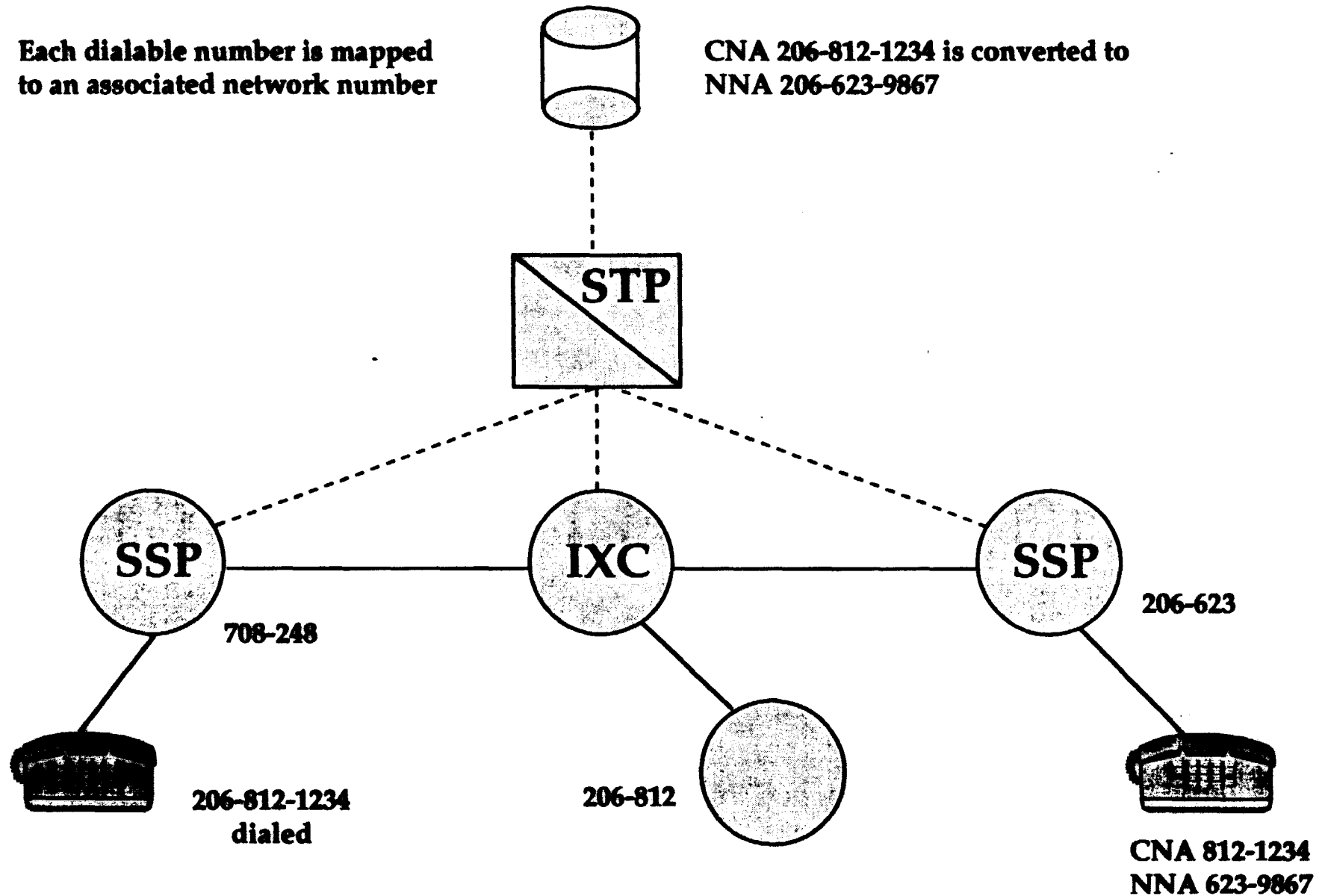
MCI CPC Proposal



Stratus Dual Numbering Proposal

Each dialable number is mapped to an associated network number

CNA 206-812-1234 is converted to
NNA 206-623-9867



Illinois Number Portability Workshop Should Serve As The Model for National Implementation

Progress/Significant Accomplishment of The Workshop

(Via Consensus Process)

- **Workshop Formed (ICC Order Requirement)** 4/95
- **Implementation Plan (Scope) Developed** 7/95
- **Established/Documented Planning Principles and Criteria for Selecting a Call Model Architecture ("LNP Framework")*** 7/95
- **Selection of LRN As Call Model Architecture *** 9/95
- **Obtained Switch Vendor Commitments To Deliver LRN Software by 2Q 97*** 10/95
- **Established Phase I Implementation Timeframe of 3Q 97***
- **Developed Detailed Switching and Signaling Generic Requirements for LRN *** 11/95
- **Developed Number Portability Administration Center/Service Management System ("NPAC/SMS") Requirements and Issued RFP for Administrator *** 2/96
- **Stipulation and Agreement Reached Among Participants *** 2/96
- **Selection of Neutral Third Party Administrator for NPAC/SMS *** 4/96
- **Joint Letter to FCC Recommending LRN As National Architecture *** 5/96

*** First in the Nation**

Illinois Number Portability Workshop Should Serve As The Model for National Implementation (continued)

- **Eight Established Subcommittees Working on Implementation Issues:**
 - NPAC/SMS
 - Billing & Rating
 - Operator Services
 - Switch Generic Requirements
 - SCP Generic Requirements
 - Operations
 - Cost Recovery
 - Coordinating Committee
- **Phase II Planning Meeting Scheduled For July 24, 1996**
 - Location Portability
 - Service Portability
 - Number Conservations/Pooling
 - Wireless Participation
 - Geographic Expansion
 - Baseline LRN Enhancements
 - Billing Enhancements
 - Impact of FCC Docket 95-116 Order
- **Significant Unresolved Issues:**
 - Limited Liability Corporation ("LCC") for NPAC/SMS
 - Geographic Expansion of NPAC/SMS Beyond Chicago
 - Operation and Testing of NPAC/SMS
 - Specific and Conversion Plan ("Roll-Out Plan")
 - Testing of LRN - Intra Network and Inter Networks
 - Many Operational Issues
 - Cost Recovery Mechanism

Implementation Activity in Illinois

- **Multi-carrier priority list published on April 15th**
- **List includes a total of 122 Ameritech switches**
- **Responses expected on May 29th**
- **Commitments hinge heavily on the availability of vendor software**
- **Full lab testing and live traffic testing is essential prior to cutover**
- **Need further discussion regarding the capability of all participating carriers and switch platforms to be ready on day 1**

Illinois Number Portability Workshop Has Selected A Neutral Third Party As The Administrator for The NPAC/SMS

- **RFP Sent To Industry** **2/1/96**
- **Proposals Submitted (8)** **3/15/96**
- **Selection of Lockheed - Martin As Winning Submission** **4/10/96**
- **Selection Criteria:**
 - **Technical Merit** **50%**
 - **Pricing** **40%**
 - **Financial Stability of Company** **10%****100%**
- **Unanimous Selection By NPAC/SMS Subcommittee of
Lockheed - Martin**
- **ICC Press Release (Attached)** **4/17/96**
- **Executive Summary of Lockheed - Martin Proposal (Attached)**

Cost Recovery Framework for Long-Term Number Portability (LNP)

| <u>LNP Model</u> | <u>Cost Elements</u> | <u>Cost Recovery Mechanism</u> |
|--|--|--|
| NPAC/SMS (shared) | <ul style="list-style-type: none"> • Set up NPAC - Initial Cost • Administration - On-going • Transactions - On-going | <ul style="list-style-type: none"> • Shared among carriers • Should Be Able To Reach Agreement Among Participants |
| LRN Specific Costs (Varies by Network) | <ul style="list-style-type: none"> • LRN switch software • SS7 augmentation (processing & links) • STP augmentation (additional LNP load) • LNP SCPs • Operations support systems (Billing, DN admin, LIDB admin, Local SMS, Maintenance & Repair, Ordering & Processing) • On-going costs | <ul style="list-style-type: none"> • Competitively neutral cost recovery mechanism needed • May Require Special Joint Board To Resolve |
| Baseline Infrastructure (Varies by Network) | <ul style="list-style-type: none"> • SS7 capability • IN or AIN capability • Switch replacement or upgrades | <ul style="list-style-type: none"> • Each network responsible • General Infrastructure for Each Carrier • Not LNP specific cost |

National Policy Framework Recommendation

Federal

- **Determine Public Interest**
- **Set National Planning Principles & Policy**
- **Determine Role of States and Implementation Planning Reports**
- **Monitor Industry Forums & States Activities**
- **Participate in Cost Recovery Joint Board**

States

- **Determine Who Participates**
- **Determine Where to Implement within States**
- **Determine When to Implement within States**
- **Participate in Cost Recovery Joint Board**

Providers & Vendors

- **Solve Technical/Operational/Administrative Issues**
- **Participate in Industry Forums**
- **Test and Implement the Plan**
- **Administer the Plan**

May 8, 1996

EX PARTE

Ms. Regina Keeney
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, NW, Room 500
Washington, D.C. 20554

Re: Telephone Number Portability, CC Docket No. 95-116

Dear Ms. Keeney,

The undersigned parties -- all participants in the Illinois Local Number Portability ("LNP") workshop process -- wish to take this opportunity to encourage the Commission to adopt the Location Routing Number ("LRN") solution as the nationwide, long term number portability architecture. We believe this will most efficiently and expeditiously meet the requirements of the Telecommunications Act of 1996 ("the Act") to implement number portability for local exchange customers.

Despite the suggestions of other carriers¹, LRN has achieved acceptance throughout the industry as the best solution to implement permanent provider portability. The Illinois workshop, like other state commission-sponsored LNP industry efforts, includes a cross section of national and local industry participants -- LECs, CLECs, interexchange carriers and cellular carriers.² Support for LRN has by no means been confined to Illinois, or to Ameritech among the RBOCs. Similar industry groups across the country -- including in New York, Maryland, Georgia, Washington and Colorado -- have conducted extensive reviews of available alternatives and likewise voted LRN as the best solution.

The Illinois workshop applied stringent policy criteria to its selection of a permanent LNP architecture, and LRN met or exceeded all of them. The criteria were: 1) national comparability 2) expandable to accommodate location and service portability; 3) causes no change in how end

¹E.g., Pacific Bell presentation and letter to the Common Carrier Bureau on April 11, 1996, in CC Docket 95-116.

²The Illinois workshop participants include Ameritech, AT&T, GTE, Cellular One, MCI and MCImetro, Sprint Communications Company, L.P., Central Telephone Co. of Illinois, Time Warner, TCG, MFS, the Illinois Commerce Commission Staff, and others.

users originate or terminate calls; 4) all participating providers can deploy the same architecture; 5) does not require routing of traffic through the incumbent LEC networks; 6) accommodates access to number portability databases at multiple locations within networks; 7) administration is performed by a neutral third-party; 8) causes no degradation of service or loss of functionality; 9) consistency with existing network infrastructure and standards; 10) conserves numbers and codes; 11) not proprietary to any single manufacturer; and 12) supports 911/E911. The undersigned parties believe these criteria are essential to any number portability architecture, whether selected for Illinois or anywhere else in the nation. Since LRN meets all of the above architecture criteria, it is an ideal number portability template for all jurisdictions.

Following its review of alternatives and selection of LRN, the Illinois industry workshop participants obtained commitments from all major switch manufacturers to deliver LRN software during second quarter 1997.³ A Stipulation and Agreement to deploy the LRN architecture in MSA-1 (the Chicago area) was signed by most of the workshop participants and approved by the Illinois Commerce Commission ("ICC").⁴ In addition, the participants completed requirements for a neutral third-party database administration system, issued a Request For Proposal ("RFP"), and recently selected a vendor to administer the LNP database (thus meeting the Act's requirement for third-party database administration). Finally, the participants continue to make progress on all related areas of LNP implementation, including operational support systems ("OSS"), rating and billing, network operations, and operator services issues. Significantly, after considerable review to date, no participant has identified any problems in these related implementation areas that would alter target implementation dates.

The undersigned parties believe the open, industry consensus-driven efforts in Illinois and elsewhere have been extremely successful in identifying a robust, nondiscriminatory, and efficient method of implementing LNP in the earliest time frame possible. However, the parties are concerned that proposals by other carriers to permit alternate solutions will delay the deployment of LNP. Specifically, one alternative to the basic LRN architecture, Query On Release ("QOR") proposed by Pacific Bell, is still under development and will not be universally available at the time of Illinois' second quarter 1997 target implementation date. QOR has not been subjected to any of the extensive examination, refinement, and generic and application software development that has been completed for LRN. Additionally, the merits of deploying this alternative are still being debated. If the industry (and especially switch vendors) were required to wait or start over at this point to accommodate QOR development, or development of any solution other than LRN in their initial software releases, LNP deployment would be

³Although it can provide tandem and end office LRN software by second quarter 1997, Ericsson has recently indicated to MFS that its SSP modifications will not be available until third quarter 1997.

⁴The Stipulation and Agreement was signed by Ameritech, AT&T, Cellular One, MCI and MCImetro, Sprint Communications Company, L.P., Central Telephone Co. of Illinois, Teleport and MFS.

significantly delayed. The undersigned parties are especially concerned that the second quarter 1997 LRN availability dates provided by switch vendors will be put in jeopardy if the vendors are diverted from the primary goal of developing software for the permanent LNP solution in order to simultaneously pursue development of interim routing schemes such as QOR.

The undersigned parties believe the Commission should immediately adopt LRN as the nationwide, long-term LNP architecture. The record in this docket and in the numerous state workshop processes demonstrate that LRN is clearly the number portability solution that can most effectively, efficiently and rapidly promote local exchange competition, in fulfillment of the Act's requirements.

Sincerely,

Terry D. Appenzeller
Vice President - Open Market Strategy
Ameritech

Pamela Kenworthy
Senior Manager - Number Resource
Planning
MFS Intelenet of Illinois, Inc.

R. G. Salemme
Vice President - Federal Government Affairs
AT&T Corporation

Edmund P. Gould
Vice President-Technology
Teleport Communications Group, Inc.

Phillip Felice
Regulatory Manager
Central Telephone Co. Of Illinois

Janis Stahlhut
Vice President - Regulatory Operations
Time Warner Communications

Donald F. Evans
Vice President - Federal Regulatory Affairs
MCI Telecommunications Corporation

Ron Havens
Director - Industry Forums
Sprint Communications Company, L P

April 17, 1996

Beth Bosch

**ILLINOIS TASK FORCE SELECTS LOCKHEED-MARTIN
TO CREATE DATABASE FOR NUMBER PORTABILITY**

The Illinois Number Portability Task Force has selected Lockheed-Martin to create a telephone number database in the Chicago metropolitan area.

Illinois is the first state to select a vendor to provide such a database. The company will be responsible for creating and maintaining the database of telephone numbers. This database will indicate which telephone company provides local telephone service to a particular telephone number, and it will be used by telecommunications companies to route calls to the correct provider. This will allow customers to keep their telephone numbers when they choose a new company to provide local service. In the future, the database also could be used to enable customers to keep their telephone numbers when moving from one exchange to another, from one area code to another, or even across the country.

The database will store numbers and serve as a reference for all portable numbers in the Chicago metropolitan area. A number is considered "ported" if the carrier billing that number has been changed. The task force, comprised of representatives of Sprint-Centel, MCI, AT&T, Ameritech Illinois, Metropolitan Fiber Systems (MFS) and Teleport Communications Group (TCG), along with Illinois Commerce Commission staff, settled on AT&T's "location routing number" system as the technical model that will allow customers to keep their telephone numbers. The Commission ratified the agreement, Docket #96-0089, on March 13, 1996.

The system will be tested first in the Chicago area, possibly as early as 1997. A separate Illinois Commerce Commission proceeding will determine rules on how, when and where number portability should be implemented elsewhere in the state and how costs may be recovered.

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**ILLINOIS COMMERCE COMMISSION
NPAC/SMS SYSTEM SUMMARY**

April 30, 1996

INTRODUCTION

Local Number Portability (LNP) is a new emerging public switched network capability that is used to support open competition between Local Service Providers (LSPs). The first live deployment of LNP is scheduled for 3Q97 in the Chicago area. LNP, in its basic form, enables a local telephone customer to change service providers while keeping their pre-existing telephone number. Key to providing portability of numbers is the ability to route calls to those numbers by consulting a database that identifies the serving switch, and therefore the network, that is currently associated with a telephone number. In order to direct call routing, this routing database must be available to all participating service providers and contain the routing for all ported numbers in the local serving area.

To ensure fair and evenhanded administration of this database amongst competing service providers, the ported number database must be administered by an independent, neutral, third party. After meeting for more than one year, the Illinois Commerce Commission NPAC SMS Committee released a RFP for procuring the Number Portability Administration Center (NPAC) Service Management System (SMS) and database as well as supporting data center, software support, and number administration operations. After a comprehensive evaluation, a team led by Lockheed Martin was chosen by the LNP Task Force Selection Committee, comprising service providers deploying LNP in the Chicago area, to provide and operate the NPAC for Illinois. The Lockheed Martin Team will develop and deploy a SMS that will maintain the master copy of the LNP database and enable service providers to process service orders to port telephone numbers between their networks and disseminate the resulting changes to that database to all participating service providers. The following document is a summary of the Lockheed Martin Team's solution for providing the NPAC SMS system and database and supporting NPAC operations.

NPAC SMS SYSTEM AND NPAC OPERATIONS SUMMARY

To provide the NPAC SMS system and database as well as the supporting NPAC infrastructure and operations, the Lockheed Martin Team's NPAC/SMS solution comprises four distinct, yet integrated, components. As shown in Exhibit 1, these components are:

1. A reliable WAN that allows Local Service Providers (LSPs) to connect to either the Primary or Backup/Disaster Recovery SMS systems.
2. A proven computing environment with a proven suite of system software
3. NPAC SMS application software that provides the required user and system functionality
4. Supporting NPAC services located in the Chicago area, including data center operations, system administration, user support, training and documentation services, and software support

Lockheed Martin will establish the NPAC in Chicago. This facility will serve as the primary NPAC SMS data center and central point for all NPAC operations. In addition, a backup/disaster recovery hot-site system will be located at Lockheed Martin's Tarrytown, New York, Data Center

NPAC/SMS COMPONENT SUMMARY

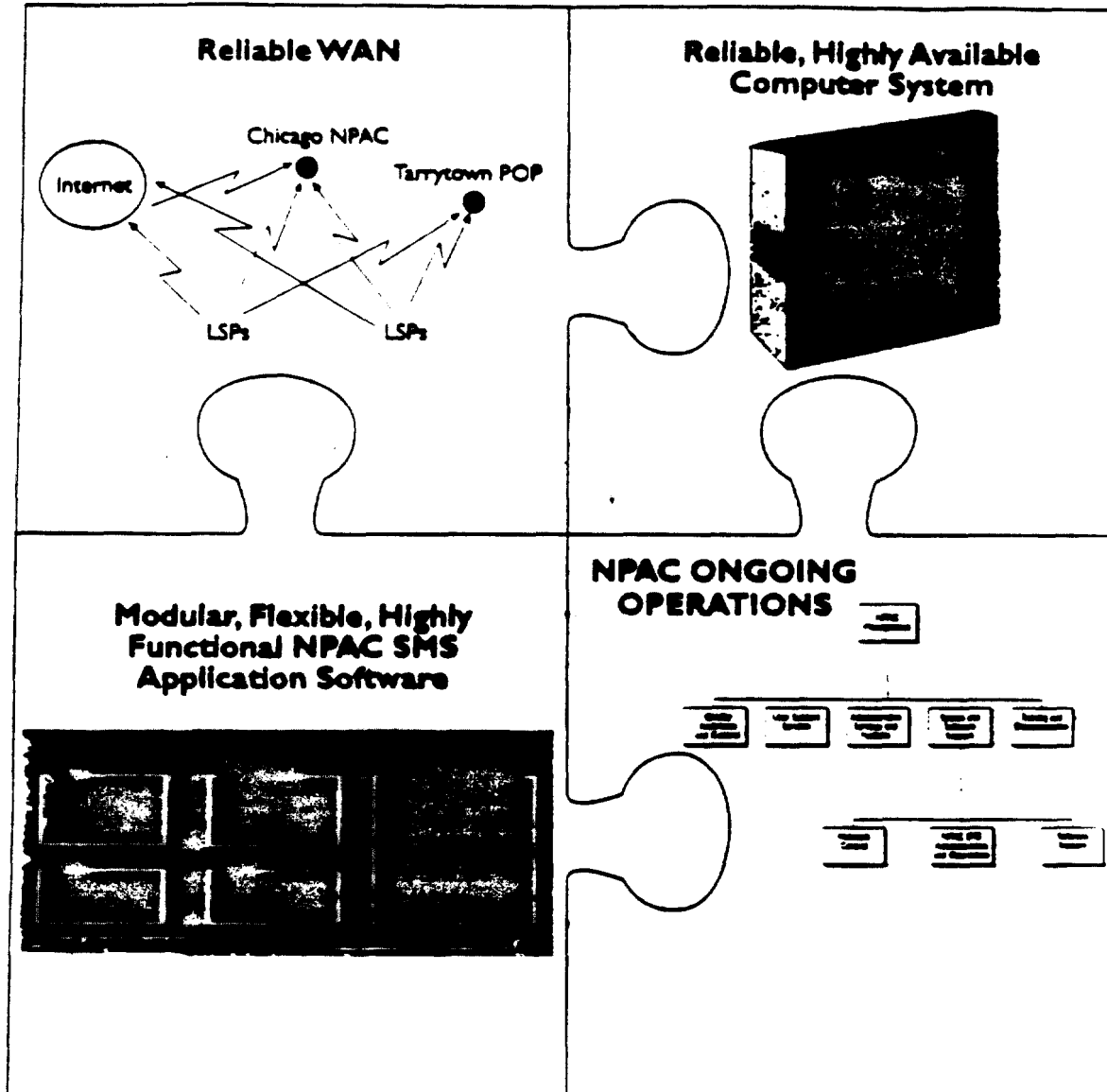


Exhibit 1. NPAC/SMS Component Summary